

1 (Marked-up Version):

2 **METHOD/PROCESS OF DETERMINING A PERSONAL DIETARY SUPPLEMENT**
3 **PROFILE AND RECOMMENDING DIETARY SUPPLEMENTS FOR AN INDIVIDUAL**
4 **[DIETARY SUPPLEMENT SELECTOR AND METHOD]**

5 **Field of the Invention**

6 A method and process for the selection of dietary supplements.

7 **Background of the Invention**

8 We are all biochemically different, and our dietary nutrient requirements for optimal health
9 vary. Each of us is unique due to variations in our genetics, lifestyle, dietary habits and health
10 problems. If we were all the same, the same multivitamin-supplement with the same doses would
11 provide the same results. Dr. Roger J. Williams, a pioneer in the field of nutrition and renowned
12 biochemist, who discovered pantothenic acid (vitamin B₅), wrote extensively on "biochemical
13 individuality" and has shown that every human is innately highly distinctive in terms of his
14 biochemistry. Dr. Williams believed that no two individuals are identical in bodily structure and
15 neither are their chemical processes always carried out in the same ways. Different persons need
16 different combinations and amounts of food elements, vitamins and other nutrients.

17 Some 106 million Americans use vitamin and mineral supplements every day, and 45 million
18 reported using herbal remedies regularly. Further, 74 million Americans are more likely to treat
19 themselves than see or consult a physician. A recent survey noted that consumers have low
20 confidence in labeling information and product safety, and that product labels, magazines, doctors,
21 books and advertising all ranked ahead of pharmacists in providing information on dietary
22 supplements. Lower than pharmacists as an information source, the survey noted, are health food
23 stores and alternative medicine practitioners. One of the last places consumers used for information
24 stores and alternative medicine practitioners. One of the last places consumers used for information

1 on dietary supplements was the Internet. Conlan MF, *Drug Topics*, October 18, 1999, pg. 58.

2 Computerized programs for medical needs are not new to the art. Potter et al. U.S. Pat. No.

3 4,733,354 discloses an interactive method for performing a differential diagnosis using a programmed

4 computer system and a stored data base. Kaufman et al. U.S. Pat. No. 5,036,462 discloses a

5 medication delivery device. Swenson et al. U.S. Pat. No. 5,632,925 discloses a virtual medical

6 instrument system for storing diagnostic test protocols. Williams III, U.S. Pat. No. 5,704,350

7 discloses a method for selecting foodstuffs to compare the user's daily dietary and physical activities

8 to the user's recommended dietary allowance. None of the above cited patents teach or suggest the

9 use of the method or process outlined in the present invention.

10 A more reliable source of information regarding the selection of dietary supplements is sought
11 by consumers and provided by the present invention.

2 Summary of the Invention

13 [This invention relates to a method and process for inputting an individual's medical
14 information and obtaining a dietary supplement profile unique for that individual.]

15 Because we are all biochemically different and our dietary supplement requirements will
16 depend on lifestyle, dietary habits, health problems and current medications, a one-size fits all
17 multivitamin supplement does not meet our individual needs. This invention offers the advantage of
18 providing a personal dietary supplement profile and recommending dietary supplements based on
19 information from a health history questionnaire, that can be further refined by incorporating physical
20 exam findings and laboratory studies.

21 Brief Description of the Drawings

22 Fig. 1 is a diagram of the process for determining the dietary supplement profile for an

1 individual.

2 Fig. 2 is a sample dietary supplement profile.

3 **Detailed Description of the Invention**

4 With reference to Fig 1, the principal components used to implement the present invention
5 are illustrated in a block diagram. At the top of the diagram the consumer completes a health history
6 questionnaire 1. The questionnaire can be in paper form to be entered into the computer database,
7 or an interactive computer format that inquires about the family history, personal health history,
8 environmental history, diet and meal pattern, food supplements, and symptom history. This
9 information is entered and stored in the computer database 2, where it is compared to a health profile
10 for a person of the consumer's age and health history background. Based on this comparison, a
11 dietary supplement profile 3 can be generated that calculates the consumers personal nutritional needs
12 of vitamins, minerals, amino acids, enzymes, herbs and other nutritional supplements to achieve
13 optimal health and wellness. Optimal health is not the absence of disease but a positive state of
14 mental and physical well-being. The dietary supplement profile 3 can be further defined into
15 commercially available products 4, for both the convenience of the consumer or for the benefit of the
16 commercial provider.

17 The health history questionnaire 1, may include a family history of parents, grandparents,
18 siblings and children identifying the most consistent illness or health problems, if known, such as
19 alcoholism, Alzheimer's disease, arthritis, diabetes, cancer, high blood pressure, liver disease, kidney
20 disease, heart disease, gout, mental illness, obesity, congenital defects and any disease known to have
21 a strong tendency to be inherited. Personal health history may inquire about childhood illnesses,
22 serious accidents, illnesses, abnormal blood test results, surgeries, weight history, prescription and

1 nonprescription medications, use of tobacco products, alcohol and illicit drugs, current major health
2 problems, change in life situations, employment, work environment, allergies, and stress. A diet and
3 meal pattern history and supplements currently used. A symptom history explores many health
4 problems from insomnia, appetite, foods, bowel habits, skin problems, nail and hair problems,
5 emotional complaints, fatigue, menstrual difficulties and stress.

6 The consumer's dietary supplement profile 3 can be further individualized by supplementing
7 information provided by a physical exam 5 which allows the practitioner to input data such as blood
8 pressure, pertinent physical and emotional findings, current medications, body fat analysis, and any
9 contraindications to dietary supplements. Laboratory studies 6 can also be incorporated into the
10 database 2, that provides additional insight into the consumers health status. Laboratory studies that
11 could be input into the database by example comprise: complete blood count and urinalysis,
12 automated blood analyses, serum vitamin levels, hair analyses or essential metabolic analysis for
13 nutritional assessment testing.

14 The computer analysis can evaluate and compare the individual's health information with
15 standardized profiles based on age, sex, physical activity, dietary habits, past medical history and
16 other items covered in the questionnaire. Some dietary supplement considerations by example include
17 the following: Persons with a high cholesterol or a family history of heart disease could increase
18 vitamin E to 400 IU, vitamin C to 1 gm, beta-carotene to 25,000 IU, chromium to 200 mcg,
19 magnesium to 400 mg; Persons over age 60 should increase zinc intake to 50 mg, calcium to 1.5 gm,
20 vitamin E to 400 IU, beta-carotene to 25,000 IU, vitamin D to 800 IU, magnesium to 400 mg,
21 chromium to 200 mcg and delete iron; If a woman is on a contraceptive pill to increase vitamin B₆
22 to 50 mg; If the woman is menopausal or postmenopausal increase calcium to 1.5 gm, magnesium

1 to 400 mg, vitamin E to 400 IU and delete iron; If a smoker or in an air-polluted area increase vitamin
2 C to 1 gm, selenium to 400 mcg, beta-carotene to 25,000 IU, vitamin E to 400 IU, copper to 3 mg
3 and zinc to 50 mg; If the subject exercises three times a week increase vitamin E to 400 IU,
4 magnesium to 400 mg, vitamin B₁ to 100 mg and zinc to 50 mg; If more than ten alcoholic beverages
5 are consumed a week increase vitamin B₁ to 100 mg, folic acid to 800 mcg and vitamin C to 1 gm.
6 If the subject is underweight or overweight a recommended weight management program can be
7 provided with the profile.

8 The invention is further illustrated by the example shown in Fig 2, which is to be regarded as
9 illustrative only, and in no way limit the scope of the invention. In this example, a vitamin and mineral
10 profile is presented for supplementation to the individual's current regimen. Amino acids, enzymes,
11 herbs and other supplements can be incorporated into the profile. The profile can also show a
12 comparison with past profiles to determine any changes in nutritional status. The profile can also be
13 further defined in terms of commercial products available by companies who provide supplements for
14 the public.

15 Although illustrative embodiments of the invention have been shown and described, a wide
16 range of modifications, change, and substitution is contemplated in the foregoing disclosure and in
17 some instances, some features of the present invention may be employed without a corresponding use
18 of the other features. Accordingly, it is appropriate that the appended claims be construed broadly
19 and in a manner consistent with the scope of the invention.

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Abstract

2 This invention provides a method [and]/process [for calculating] of determining a personal
3 dietary supplement profile [for an individual] of vitamins, minerals, amino acids, enzymes, herbs, and
4 other nutritional supplements [to obtain optimal health and wellness by completing] for an individual
5 based on information from a health questionnaire [and optionally adding] and comparing the
6 individual's health information to [a standard] an ideal health profile in a computer data base.
7 Optionally, information provided by physical examination and laboratory studies can be incorporated
8 into the method/process of determining the dietary supplement profile. [The method and process
9 further comprises a list of commercially available products that provide the items listed in the dietary
10 supplement profile.] The profile can be further defined by listing commercially available products that
11 provide the suggested dietary supplements.

Conclusion

For all of the above reasons, Applicant submits that the Response to the Office Action is consistent with the requirements of 35 U.S.C. § 112, 2nd paragraph, and § 102(e). Applicant has amended the claims of this application so that they are proper, definite, and define novelty which is also unobvious. If for any reason this application is not believed to be in full condition for allowance, applicant respectfully requests the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. § 706.03(d) and § 707.07(j) in order that the undersigned can place this application in allowable condition as soon as possible and without the need for further proceedings.

Respectfully submitted,

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